

**REMARKS**

Upon entry of this paper, claim 1 has been amended, claim 5 has been canceled, and no claims have been added as new claims. Thus, claims 1, 2, and 4 are presently pending in this application, while claims 6-9 are withdrawn. No new matter has been added. The cancellation of claim 5 should in no way be construed to be an acquiescence to any of the rejections stated. Claim 5 is being canceled solely to expedite the prosecution of the present application. Applicant reserves the option to further prosecute the same or similar claims in the instant or a subsequent patent application.

**Claim Rejections Under 35 U.S.C. § 112***Claims 1, 2, 4, and 5*

Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the Examiner has asserted that there is no support in the specification for the volume of the chamber being “about zero.” Applicant has amended claim 1 to remove the “about zero” language, in an attempt to more clearly claim that which Applicant believes to be the invention. Support for the amendment can be found in the last paragraph of page 4, continuing to page 5, of the translated specification. Accordingly no new matter has been introduced.

In view of the amended language, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections Under 35 U.S.C. § 102*****Claims 1, 2, 4, and 5***

Claims 1, 2, 4, and 5 were rejected under 35 U.S.C. 102(b) as being anticipated by Lester. Applicant respectfully traverses this rejection. However, in an effort to move the present application toward issuance of a Notice of Allowance, Applicant has further canceled claim 5 and amended claim 1 to attempt to more clearly claim that which Applicant believes to be the invention of the pending application. Additional remarks are accordingly provided below.

Specifically, the Examiner has stated that Lester is “capable of performing the features as claimed . . .” *See OA*, paragraph 6. However, the Examiner has provided no citation or other evidence as to where in Lester such capability is disclosed. Contrary to the Examiner’s assertion as to what may be found in Lester, the actual text of Lester indicates that the device of Lester is not in fact capable of performing the features claimed.

More specifically, Lester states that there are limit switches that provide, “hydraulic system signals for stopping the plunger 15 in place respectively to eject the molded article and set the capacity of the metering chamber 20.” Col. 4, lines 16-18. As such, the device of Lester requires that the plunger 15 maintain the large chamber 20 as a finite measure of the amount of mold material to inject into the mold. The plunger 15 is positioned to form the large cavity or chamber 20 as the only form of metering or measuring the requisite amount of material. If Lester were to operate as claimed in the pending application, Lester would have no means for measuring the amount of material to place in chamber 20. There is no mechanism in Lester that enables the close placement of plunger 15 almost in direct contact with plunger 17, only to move and form chamber 20 upon the infusion of the molten material. Furthermore, if the plunger 15 of Lester were to move sufficiently in the direction of the plunger 17 as to almost directly contact the plunger 17, then there would be an insufficient amount of material disposed between the two plungers 15 and 17 for forming a molded item. Thus, despite the Examiner’s assertion that Lester is “capable” of having plunger 15 move almost into direct contact with plunger 17, there is no disclosure in Lester of such ability, nor is there evidence that Lester could operate if such ability existed.

Said differently, the device of Lester would not function if the asserted capability existed in Lester to move plunger 15 so close to plunger 17 so as to almost make direct contact with plunger 17. The device in Lester relies on the ability to form the chamber 20 as its method of measuring the amount of material needed for the mold. There is no indication in Lester of a control device or mechanism that can move plunger 15 into almost direct contact with plunger 17, and then move plunger 15 in conjunction with the introduction of molten material into what would become chamber 20 as plunger 15 moved in a manner that did not expose the molten material to excess air. No control functionality exists in Lester, and the device itself has no means for implementing such action.

Anticipation can only be established by a single prior art reference which *discloses* each and every element of the claimed invention. Accordingly, Applicant respectfully requests that if this rejection is to be maintained, that the Examiner either provide a citation from Lester containing the alleged disclosure, or alternatively submit a signed affidavit detailing the foundation for the assertion that the device of Lester, “is configured to achieve the minimum volume of the chamber before feeding the material into the chamber and expand the chamber to a maximum volume as the material is fed into the chamber” *See* claim 1.

Otherwise, Applicant respectfully requests reconsideration and withdrawal of this rejection.

*Claims 1, 2, 4, and 5*

Claims 1, 2, 4, and 5 were also rejected under 35 U.S.C. 102(b) as being anticipated by Chadwick. Applicant respectfully traverses this rejection. However, in an effort to move the present application toward issuance of a Notice of Allowance, Applicant has further canceled claim 5 and amended claim 1 to attempt to more clearly claim that which Applicant believes to be the invention of the pending application. Additional remarks are accordingly provided below.

Again, the Examiner asserts, without citation or other actual disclosure evidence, that Chadwick “appears to show the invention as claimed.” *See* OA, paragraph 7. Applicant

reminds the Examiner that to constitute an anticipation under 35 U.S.C. §102, all the claimed elements *must be found* in exactly the same situation and united in the same way to perform the identical function in a single unit of the prior art. As with Lester, Chadwick also fails to disclose a device, “configured to achieve the minimum volume of the chamber before feeding the material into the chamber and expand the chamber to a maximum volume as the material is fed into the chamber” *See* claim 1.

More specifically, Chadwick states that, “a pillar 6 . . . which is slidable in a sleeve 8 seals the central region 3A and the piston 4 is fully retracted. Chamber 5 will be charged with molten metal in this position.” See col. 4, lines 24-28. Thus, Chadwick requires that the piston 4 be fully retracted when molten material is added to the chamber. Accordingly, Chadwick is unable to move piston 4 until it almost directly contacts the pillar 6, and then add molten material as piston 4 slides to reveal the chamber 5. The device of Chadwick is therefore not capable of operation in the same manner as the present claimed invention.

Applicant respectfully requests reconsideration and withdrawal of this rejection.

### **Claim Rejections Under 35 U.S.C. § 103**

#### *Claims 1, 2, 4, and 5*

Claims 1, 2, 4, and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lester in view of Chadwick or GB 2,129,343 and vice versa. Applicant respectfully traverses this rejection. However, in an effort to move the present application toward issuance of a Notice of Allowance, Applicant has further canceled claim 5 and amended claim 1 to attempt to more clearly claim that which Applicant believes to be the invention of the pending application. Additional remarks are accordingly provided below.

As shown above, both Lester and Chadwick fail to disclose a device, “configured to achieve the minimum volume of the chamber before feeding the material into the chamber and expand the chamber to a maximum volume as the material is fed into the chamber” *See* claim 1. The addition of GB ‘343 either separately or in combination with either or both of Lester and

Chadwick fails to teach or suggest the claimed configuration. This is further evidenced by the Examiner's reliance in paragraph 10 on Lester and Chadwick to purportedly disclose the missing elements now clarified in claim 1.

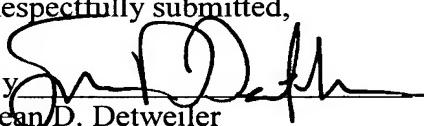
Accordingly, Applicant respectfully submits that the combinations asserted in this rejection fail to teach or suggest, and likewise fail to disclose, the invention of the amended claims. Reconsideration and withdrawal of this rejection is respectfully requested.

## **CONCLUSION**

In view of the foregoing, it is respectfully submitted that this application is now in condition for allowance. Applicant courteously solicits allowance of the claims in the form of a Notice of Allowance. Should there be any further outstanding issues of patentability following the entry of this amendment, a telephone interview is respectfully requested to resolve such issues.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account. A duplicate copy of this sheet is enclosed.

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